

Name: \_\_\_\_\_

### p1029: Combine Like Terms (v15)

#### Example

Combine like terms.

$$-5x^2 + 6 + 1 - 8x - x^2 - 4x^2 - 9x + 9x + 5 - 6x$$

#### Answer

Combine the quadratic terms.

$$-5x^2 - x^2 - 4x^2 \equiv -10x^2$$

Combine the linear terms.

$$-8x - 9x + 9x - 6x \equiv -14x$$

Combine the constant terms.

$$6 + 1 + 5 \equiv 12$$

The final result:

$$-10x^2 - 14x + 12$$

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#### Question 1

Combine like terms.

$$-7x^2 - 8x - 6 + 8x^2 + x + 9x - 2 + 2x^2 - 5 + 5$$

$$3x^2 + 2x - 8$$

**Question 2**

Combine like terms.

$$-9 - 3x + 3x^2 + 9 + 7x - 4 - 8x^2 + 8x^2 - 7x + 6$$

$$3x^2 - 3x + 2$$

**Question 3**

Combine like terms.

$$3x^2 - 1 + 4x^2 - 5x^2 - 2x + 7 + x + 6x + 5 + 9x^2$$

$$11x^2 + 5x + 11$$

**Question 4**

Combine like terms.

$$4x + 2x^2 + 9x^2 - 2x + 6 + 5 - 3x^2 - 9x - 7 + 1$$

$$8x^2 - 7x + 5$$